ABSTRACT

An aqueous composition is useful for polishing semiconductor wafers. The composition comprises a nonionic surfactant that suppresses removal rate of silicon carbidenitride and has a hydrophilic group and a hydrophobic group. The hydrophobic group has a carbon chain length of greater than three. And the nonionic surfactant suppresses silicon carbide-nitride removal rate at least 100 angstroms per minute greater than its decrease in silicon nitride removal rate as measured with a microporous polyurethane polishing pad pressure measured normal to a wafer of 13.8 kPa.